# State of California AIR RESOURCES BOARD

#### **EXECUTIVE ORDER G-70-197**

# Certification of the Synchrotek Fastflo 3 Phase II Vapor Recovery System

# American Controls, Incorporated Anguil Environmental Systems, Incorporated

WHEREAS, the California Air Resources Board ("the Board" or "CARB") has established, pursuant to California Health and Safety Code sections 39600, 39601 and 41954, certification procedures for systems designed for the control of gasoline vapor emissions during motor vehicle fueling operations (Phase II vapor recovery systems) in its "CP-205 Certification Procedure for Vapor Recovery Systems of Novel Facilities" (the "Certification Procedures") as last amended March 17,1999, incorporated by reference into title 17, California Code of Regulations, section 94015;

WHEREAS, the Board has established, pursuant to California Health and Safety Code sections 39600, 39601 and 41954, test procedures for determining the compliance of Phase II vapor recovery systems with emission standards in its "Determination of Efficiency of Phase II Vapor Recovery Systems of Novel Facilities", TP-205.2 ("the Test Procedures") as last amended March 17, 1999, incorporated by reference into title 17, California Code of Regulations, section 94015;

WHEREAS, American Controls, Incorporated/Anguil Environmental Systems, Incorporated (ACI/Anguil) (the manufacturer) have requested certification of a Phase II Vapor Recovery System (the system) to be used in continuous, rapid gasoline fueling at General Motors Corporation automobile assembly plants pursuant to the Certification Procedures and Test Procedures;

WHEREAS, the system met the certification requirements when tested in accordance with TP-205.2 on August 7, 1996 and was approved by (1) CalOSHA on August 19, 1996, (2) Weights and Measures on October 31, 1996 and (3) State Fire Marshal on July 21, 2000;

WHEREAS, the system has not been tested to determine ORVR compatibility;

WHEREAS, the Executive Officer has determined, pursuant to Section 3.1 of Vapor Recovery Certification Procedure CP-205, "Certification Procedures for Vapor Recovery Systems of Novel Facilities", that components used in installations of the system must meet the applicable performance standards and specifications of Certification Procedure CP-201, "Certification Procedure for Vapor Recovery Systems of Dispensing Facilities" (Certification Procedures) at last amended on June 1, 2001, incorporated by reference in title 17, California Code of Regulations, section 94011;

WHEREAS, the system has been evaluated pursuant to the Board's Certification Procedures;

WHEREAS, Section 7 of CP-205 provides that the Executive Officer shall issue an order of certification if he or she determines that the system conforms to all of the requirements set forth in Section 1 through 6 of CP-205;

WHEREAS, I, Michael P. Kenny, Air Resources Board Executive Officer, find that the system conforms with all the requirements set forth in CP-205 and results in a vapor recovery system which is at least 95 percent effective for automobile/truck fueling at GMC assembly plants when meeting the requirements contained in Exhibits 1 and 2 of this order.

WHEREAS, section 17 of CP-201 provides that the Executive Order shall include applicable performance standards, performance specifications, operating parameters and limitations and warranty periods;

NOW, THEREFORE, IT IS HEREBY ORDERED that the system is certified to be at least 95 percent effective when installed and operated in accordance with the CARB approved system manual with the equipment specified in the manual and Exhibit 1 of this order and which meets the requirements of Exhibit 2 of this order.

IT IS FURTHER ORDERED that the system, as installed, shall comply with the procedures and performance standards the test installation was required to meet during certification testing.

IT IS FURTHER ORDERED that compliance with the certification requirements and rules and regulations of the State Fire Marshal's Office and the Division of Occupational Safety and Health of the Department of Industrial Relations are made a condition of this certification.

IT IS FURTHER ORDERED that the system shall be installed in accordance with the manufacturer's manual and shall use the manufacturer's recommended operation and maintenance procedures as approved by CARB (see Exhibit 3). Revisions to the manufacturers' manuals shall be approved by CARB. The Executive Officer may add or delete instructions from the manuals and distribute revised copies in accordance with CP-201.

IT IS FURTHER ORDERED that the manufacturer shall provide a CARB approved copy of the system manual to each facility in which the system is installed. The manufacturer shall provide instructions in the proper use of the system, repair and maintenance schedules and locations where system and/or component replacements can be readily obtained.

IT IS FURTHER ORDERED that a copy of this Executive Order shall be stored at each facility in which the system is installed.

IT IS FURTHER ORDERED that the manufacturer shall warranty the system for at least one year, in writing, to the ultimate purchaser and each subsequent purchaser, that the vapor recovery system is designed, built and equipped so as to conform, at the time of original installation or sale, with the applicable regulations and is free from defects in materials and workmanship which would cause the vapor recovery system to fail to conform with applicable regulations. The manufacturer shall provide copies of the manufacturer's warranty for the system.

IT IS FURTHER ORDERED that any alteration of the equipment, parts, design, or operation of the systems certified hereby is prohibited unless such alteration has been approved by the Executive Officer or his or her designee. Any unapproved alteration shall void the certification for the specific installation where such alteration occurred.

IT IS FURTHER ORDERED that the system may only be installed at the specific General Motors Corporation facilities as listed in Exhibit 4.

Executed at Sacramento, California, this 2 day of \_\_\_\_\_5

James J. Morgester, Chief Compliance Division

### Exhibit 1

# EQUIPMENT LIST FOR THE SYNCHROTEK FASTFLOW 3 PHASE II VAPOR RECOVERY SYSTEM

Component	Manufacturer/Model	State Fire Marshal Identification Number
Nozzle	OPW Model 11VF	005:008:037
	Synchrotek Fastflo 3	005:057:001
Coaxial Hoses	Any CARB-certified coaxial hose listed in current revision of Executive Order G-70	
Processor Unit	ACI/Anguil Model 2.5 Catalytic Oxidizer	005:058:001

#### Exhibit 2

### SPECIFICATIONS FOR THE SYNCHROTEK FASTFLOW 3 PHASE II VAPOR RECOVERY SYSTEM

#### 1. System

The "Synchrotek Fastflo 3" system dispenser is specifically designed for automobile assembly plants with high volume vehicle production. The system consists of an ACI/Anguil Model 2.5 catalytic oxidizer and a Synchrotek Fastflo 3 gasoline vapor recovery dispensing nozzle with vacuum assist provided by an air driven venturi tube system. The nozzle is mounted to a dispensing rail which allows fueling to be accomplished while the vehicle is in motion along the assembly line.

The Synchrotek Fastflo 3 fueling system is semiautomatic. The operator manually inserts the nozzle into the vehicle fuel intake tube and selects the fuel type and batch quantity by depressing the proper color coded "cycle start" button. The vapor return path is opened and fueling commences. After fueling is completed, the vapor return path is automatically closed, the nozzle automatically retracted and the nozzle returned to the starting position.

The fueling area is also equipped with a manual fueling system (with an OPW 11VF fueling nozzle) which can be used whenever the Synchrotek Fastflo 3 system is non-operational.

#### 2. Nozzles

- 2.1 The Synchrotek Fastflo 3 nozzle shall be operated with a maximum fueling rate of 12.0 gallons per minute.
- 2.2 The OPW 11VF nozzle shall be operated with a maximum fueling rate of 11.0 gallons per minute.

#### 2. Vacuum Generating Station

The air supply pressure for the venturi tube within the vacuum generating station shall be set within the range from 10.5 to 11.5 pounds per square inch (psi) gauge in order to provide adequate collection of the gasoline vapors generated within the fuel tank. A permanent operational gauge shall be installed on the unit.

#### 3. Vapor Processing Unit

The minimum catalyst inlet temperature shall be 700 degrees Fahrenheit (°F). A permanent operational gauge shall be installed on the control panel for the ACI/Anguil catalytic oxidizer unit.

#### Exhibit 3

# CARB APPROVED MANUFACTURER'S MANUALS FOR THE SYNCHROTEK FASTFLOW 3 PHASE II VAPOR RECOVERY SYSTEM

SYNCHROTEK AUTOMATION INC. FASTFLO NOZZLE

October 18, 2000

ACI – INTEGRATED VAPOR TREATMENT MODULE

1999 Template Update Draft

System Description

Control Panel

Control Device Set Points

Installation Instructions

Operation Instructions

Trouble Shooting Section

Preventive Maintenance

#### Exhibit 4

# APPROVED GENERAL MOTORS CORPORATION FACILITIES FOR INSTALLATION OF THE SYNCHROTEK FASTFLOW 3 PHASE II VAPOR RECOVERY SYSTEM

Arlington Assembly Plant 2525 East Abram Arlington, Texas 76010

Janesville Assembly Plant 1000 Industrial Ave. Janesville, Wisconsin 53546

Pontiac East Assembly Plant 820 South Opdyke Rd. Pontiac, Michigan 48341-3123 Flint Assembly Plant G-3100 VanSlyke 7& Atherton Rd. Flint, Michigan 48551

Linden Assembly Plant 1016 West Edgar Rd. Linden, New Jersey 07036-0805

Wentzville Assembly Plant 1500 East Route A Wentzville, Missouri 63385